The Unreasonable Ineffectiveness of Mathematics in the Quizbowl Sciences

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Tossups

1. This man once declared that "no nation can be great whose people are narrow in thought or in action" in a plea against communal violence. This man coined the term "Non-Aligned Movement" to describe his country's unwillingness to firmly align itself with either the Soviet Union or the United States. This man announced that "a moment comes rarely in history when the soul of a nation, long suppressed, finds utterance" as his country gained its independence, and that quotation is from a speech titled "A Tryst with Destiny". This man had a relationship with Lady Edwina Mountbatten, and his daughter was assassinated for ordering the storming of the Golden Temple in Amritsar. For 10 points, identify this man, the father of Indira Gandhi and the first and longest-serving Prime Minister of India.
ANSWER: Pandit Jawaherlal **Nehru**   AR

2. One of this author's characters advises, "Run mad as often as you choose, but do not faint." Another character created by this author once claimed that "nature has given [women] so much [understanding] that they never find it necessary to use more than half." That character is a clergyman whose "filial disobedience" ends in his marriage to Catherine. This author also wrote about a man who is almost seduced by Mary Crawford only to realize he is in love with his cousin Fanny, while another novel by this author sees the illegitimate Harriet end up with a farmer, but not before she sets her sights on both Mr. Elton and Mr. Knightley. For 10 points, name this author of *Mansfield Park* and *Emma*, who wrote about Elizabeth Bennet in *Pride and Prejudice.*
ANSWER: Jane **Austen**   HZ

3. This muscle of the human body is innervated by the spinal accessory nerve and the ventral ramii of the C3 and C4 nerves. Its blood supply comes from the transverse cervical artery. This muscle originates on the external occipital protuberance and the superior third of the ligamentum nuchae, as well as the spinous processes of all the cervical and thoracic vertebrae. It inserts on the posterior lateral third of the clavicle. The upper fibres of this muscle run inferiorly, the middle fibres, horizontally, and the lower fibres, superiorly, to the scapula. For 10 points, name the most superficial muscle of the posterior thorax, which has a flat and triangular shape.
ANSWER: **trapezius**   LY

4. In a play titled after one of this man's daughters, Queen Eurydice kills herself when she sees the cruelty of her husband, and this man received a prophecy that he would die on land that was sacred to the Furies. This man sent Creon to the Oracle of Delphi in an attempt to end the pestilence that affected the city he ruled. After his exile, his sons shared his kingdom, with each son ruling the city for a year at a time, and the failure of that arrangement led his elder son, Polynices, to lead the armies of the Seven Against Thebes. Raised by Polybus and Merope, this man unwittingly killed his birth father in a dispute over a road-crossing. For 10 points, identify this man who, according to Sophocles' account, used Jocasta's pin to blind himself after realizing that the woman he had been sleeping with was his mother.
ANSWER: **Oedipus**   AR

5. In 2009, this person became one of the first honorary senators named by the Canadian government, and Barbara Paterson crafted a well-known likeness of this person. This person took a stance in support of eugenics, and mocked Sir Rodman Roblin in a play that declared, "Politics unsettle men and unsettled men means unsettled bills, broken furniture, broken vows, and divorce." This person asked, "Why are pencils equipped with erasers if not to correct mistakes?" while arguing in support of equal divorce laws, and this person who wrote *The Women's Parliament* was amongst the group who won a landmark court case allowing women to sit in the Canadian Senate. For 10 points, name this suffragette who helped win the Persons Case as part of the Manitoba Famous Five.
ANSWER: Nellie **McClung**   JL

6. One athlete representing this principality won 2 silver medals in the World Cup of Kung Fu in 2007, while another representative team took home the egg throwing world championship in 2008. This principality also boasts an impressive economy where unemployment rate and poverty are at 0%, while the literacy rate is over 95%. The current prince-regent of this principality was taken hostage in 1978 by German and Dutch mercenaries but was quickly rescued by his father. In 2007, The Pirate Bay made a failed attempt to buy this principality as an alternative operations base. Located in the North Sea just 13 km off the coast of England, name for 10 points, this principality which does not yet have official recognition by any established states.
ANSWER: Principality of **Sealand**   KV

7. The relationship between this quantity and the contact angle can be studied using the Young-Dupre equation. An important rule concerning this property dictates that is has a linear dependence on temperature, and a direct consequence of that rule named after Eotvos is that there must exist a critical point where this value is zero. In a simultaneously isobaric and isothermal system, the partial derivative of Gibbs free energy with respect to area yields this quantity. Differences in this property between two interfaces yield to the formation of tear drops of wine in the Marangoni effect, and more commonly results in the formation of a meniscus in burettes and test tubes. For 10 points, name this property that causes bubbles to take shape and water to form drops.
ANSWER: **surface tension**   AR

8. The music video for one of this singer's earliest singles was directed by Sean Penn and sees her go to a club with her partner, but end up spending the night by herself. That song, "Dance With The One That Brought You", was off this singer's self-titled debut album. One of the singles off this singer's third album sees her snidely turn down various men because she is searching for someone who will keep her "warm in the middle of the night". "That Don't Impress Me Much", "Any Man Of Mine" and "Man! I Feel Like A Woman!" are tracks by, for 10 points, what Canadian superstar who achieved the best-selling album by a female artist, as well as the best-selling country album of all time, with her 1997 album, *Come On Over*?
ANSWER: Shania **Twain** [accept Eilleen Regina **Edwards**]   AR

9. "A deaf-mute talking to himself in sign language" is an image evoked in a poem about "Thirty-Six Ways of Looking at [this city]", and that poem is by Phyllis Gotlieb. This city's current Poet Laureate was shortlisted for the 2011 Griffin Poetry Prize for her work *Ossuaries*, and this city titles an unfinished trilogy whose first novel is narrated by the ghost of Connor Gilmartin. One novel set in this city depicts the lives of Macedonian immigrants such as Nicolas Temelcoff, as they help build one of this city's notable landmarks, the Prince Edward viaduct. For 10 points, name this setting of such novels as *Murther and Walking Spirits* and *In the Skin of a Lion*, the current home of Dionne Brand and Margaret Atwood, which is also Canada's largest city.
ANSWER: **Toronto** [give 10 points and a high five for Phyllis **Gotlieb** before "a poem about"]   HZ

10. An early work by this artist shows two women dressed in black with one instructing the other on a ballet stance. That work was an experiment in incandescent lighting, titled *Ballet Lesson*. This artist's time with the Little Theatre led him to become a master of artificial lights, and he used this knowledge to light the hands separately when he photographed a subject. One of this man's works contains a large vase with a nude woman painted on it in the right half of the frame, while the left half shows the artist whose ceramic studio the photo was taken in, Pablo Picasso. This man's most famous portrait was staged when he took a cigar out of his subject's mouth, and that photo, titled *Roaming Lion*, is the most reproduced photograph of Winston Churchill. For 10 points, name this Armenian-born Canadian portrait photographer, the brother of Malak Karsh.

ANSWER: **Y**ousef **Karsh** **JL**

11. One work by this thinker claimed that the source of happiness was *"far niente"* or "doing nothing", and that work was a series of meditations on this man's exile, titled *Reveries of a Solitary Walker*. Another of this thinker's works claims, "The search... for principles and axioms in science... is beyond a woman's grasp," and that work was heavily criticized by Mary Wollstonecraft. This thinker advocated splitting administration into two parts: a "sovereign" to represent the general will, and a "government" to apply the law, in a work which states, "The legislative power belongs to the people, and can belong to it alone." For 10 points, name this author of *Emile*, who stated, "Man is born free, and everywhere he is in chains," in *The Social Contract*.

ANSWER: Jean-Jacques **Rousseau** **HZ**

12. Kjeldahl and Kuhlmann both name methods related to this procedure, and the mechanism for this procedure was first described in detail by Gerhardt Ertl. This method originally used osmium as a catalyst, though modern variations use either enhanced iron or ruthenium catalysts, and it is named for a man who developed a method for analyzing reaction energies with Max Born. This process uses methane as a source of hydrogen gas, and passes gases over four beds of catalyst at high pressure and temperature to fix inert nitrogen gas. For 10 points, name this most widely used method for the industrial production of ammonia.

ANSWER: **Haber**-Bosch **process** **AR**

13. One conflict during this monarch's reign was the Battle of Villalar, in which her son's victory ended the Revolt of the Comuneros. This monarch's husband and father signed a treaty to keep her out of government, though her father reneged the same day that it was signed. After her husband Philip I's death, her country fell into disorder when neither she nor her six-year-old son were perceived fit to rule. After her father's death, her son ascended to the throne as the first monarch of the unified kingdom of Spain; that son was Holy Roman Emperor Charles I. For 10 points, name this second daughter of Ferdinand and Isabella, and first queen regnant of the kingdoms of both Castile and Aragon, who had a history of mental illness.

ANSWER: **Joanna the Mad** or **Juana la Loca** [accept **Joanna of Aragon** or **Joanna of Castile** until those kingdoms are mentioned] **KV**

14. The main conflict in this story occurs because the protagonist's mother is concerned that her family will look poor, prompting her to send a letter requesting the title object. The protagonist states that that title object "weighed on my shoulders like a mountain" and is sent by the vicar to pray for God's forgiveness, but he instead prays for God "to send, as quickly as possible, moths that would eat up" the title object. The narrator states that his "real life was on the skating rink" and attests to his town's obsession with Maurice Richard in, for 10 points, which story quoted on the five-dollar bill, which begins, "The winters of my childhood were long, long seasons"?

ANSWER: "Le **Chandail d'Hockey**" or "The **Hockey Sweater**" **HZ**

15. This man fought in the Promeranian War between Sweden and Prussia, but was captured by a Prussian Hussar regiment, and ended up joining their side for the remainder of the war. Although Frederick the Great of Prussia once said that this person could "go to the devil", he was eventually made commander of the Prussian army during the Napoleonic Wars. He spent the entire battle of Ligny trapped underneath his dead horse. Known for defeating Napoleon at the Battle of Waterloo along with co-commander Arthur Wellesley, for 10 points, name this famed Prussian military commander.
ANSWER: Gebhard Leberecht von **Blucher**   **AS**

16. Under the tutelage of Rudolf Nureyev, this woman and Frank Augustyn were known as the "gold dust twins" and won their category in the 1973 competition in Moscow where she also won silver in the women's category. Her first solo stage role was of the Swan Queen, and her swansong to her most famous profession was a primary role in *The Actress*, choreographed for her by James Kudelka. During a remarkably long 28-year career in her profession she accumulated a repertoire that included all major full-length ballerina roles, including Aurora and Giselle. For 10 points, name this former Prima and current Artistic Director of the National Ballet of Canada.
ANSWER: Karen **Kain**   **JL**

17. This piano composition was written in C-sharp minor, beginning with a two-bar sforzando octave on the dominant note and leading to two bars of unaccompanied arpeggios on the tonic in the left hand. Many cross-rhythms are used in the first section, which was written in cut time and marked "Allegro agitato". The left hand plays a series of sextuplets while the right hand plays the melody in sixteenth notes. Two bars marked "Largo" indicate the transition of the piece to the middle section in common time and in D flat major. The melody of the middle section, marked "Moderato cantabile", was used in the song "I'm Always Chasing Rainbows". For 10 points, name this piano composition originally composed by Chopin and published posthumously against his wishes by Julian Fontana.
ANSWER: **Fantaisie-Impromptu**, Op. 66   **LY**

18. Quantumly, this action can be performed by a method involving mapping qubits to the +1 eigenspace of tensor products of Pauli matrices and measuring the generators of the stabilizer of those operators. A theorem by Shannon gives an upper bound on the efficiency of this action, and the Viterbi algorithm can be used to perform this action when used with convolutional codes. One method for doing this uses calculations over a Galois field to encode and decode data. That is the Reed-Solomon method, while a less effective method for doing this simply introduces redundancy in data. For 10 points, checksums can help with performing what operation through which a system attempts to recover from corrupted data?
ANSWER: **error correction** [prompt on "error detection"; accept **fault tolerance** though it isn't exactly the same thing; accept word forms]   **HZ**

19. Master Abraham connects the two parts of one novel by this author, in which the title feline's reminiscences are intercut with the biography of Johannes Kreisler. Another novel by this author contains a hairdresser with two personalities, known alternately as Peter Schoenfeld and Pietro Bellocampo, who tries to save the monk Medardus from the title substance. This author of *The Life and Opinions of the Tomcat Murr* and *The Devil's Elixirs*, also wrote a story in which one character screams, "Pretty eyes! Pretty eyes!" before jumping off a balcony to his death. That character is engaged to Clara but is enchanted by the automaton Ophelia and becomes deranged when he believes a barometer salesman to be the title figure. For 10 points, name this German author of "The Sandman".
ANSWER: Ernst Theodor Amadeus **Hoffman**   **HZ**

20. This autosomal recessive disorder is caused by a genetic mutation in the neurotrophic tyrosine kinase receptor, or NTRK1 gene, which is a receptor for nerve growth factor. That mutation leads to defective nerve function in patients with this disorder that often includes features such as chronic bone and joint infection, fractures, and scarring of the tongue, lips and gums. There are currently no known cures or treatments for this disorder, though naloxone is now being used experimentally. People with this disorder rarely pass age 25, often due to their inability to sweat, which leads to the development of hypothermia. For 10 points, name this rare nervous system disorder in which sufferers are unable to feel pain.
ANSWER: **congenital insensitivity to pain with anhidrosis** or **CIPA**
or **hereditary sensory and autonomic neuropathy type IV** or **HSAN IV**   KV

21. This goddess narrates a story in which Isis tricks the sun-god into revealing his secret name. In later years, the dominance of the cult of Isis led to this goddess being regarded as merely an aspect of Isis. This goddess was considered one of the protectors of the dead because she was associated with the stiffening process of embalming. This goddess, generally regarded as a goddess of healing, was specifically associated with the curing of poisonous bites and stings. Along with Nephthys, this goddess once convinced Isis to turn to Ra for help in order to save Horus' life. Because of her role in protecting against poison, she is sometimes regarded as the goddess who protected the rest of the deities from the snake-demon Apep. For 10 points, name this Egyptian goddess, the deification of the scorpion.
ANSWER: **Serqet**   AR

22. Two characters from this series are put on house arrest after having a duel with lightsabers in a courtroom. Those lightsabers were collectibles belonging to another character, whose agoraphobia leads his boss to recommend him to a therapist later charged with fraud for impersonating a psychiatrist. That boss is himself tried for murdering his best friend while on a mountaineering expedition, but is acquitted of those charges on a basis of self-defense. Stanton Infeld recruits the two main characters to the law firm of Infeld & Daniels at the beginning of this series. For 10 points, name this series titled after two unconventional lawyers who believe you can make a party out of anything, even jury selection.
ANSWER: ***Franklin & Bash***   KV

23. This phrase titles a novel about a cyborg named Lila Black assigned to protect an Elven rock star, the first book in Justina Robson's *Quantum Gravity* series. "Mama Please" and "Broken Wings" are two songs off of the C-Block album of this name, while in a scene in *Clueless*, Dion's boyfriend offers this phrase as his reason for shaving all his hair off at a party. Skits such as one in which Brenda Johnson receives a wrong number call and mistakenly assumes the caller to be fooling around with her boyfriend were part of a segment introduced in the second season of Chappelle's Show, cautioning against this idea, titled "When [this phrase] Goes Wrong". For 10 points, give this phrase, the title of Al Sharpton's radio show, which refers to a person's desire to stay true to oneself.
ANSWER: **keeping it real**   HZ

24. In his book, *The Seven Principles of Making a Marriage Work*, John Gottman argues that while partners may think they are trying to be neutral, doing this instead of acknowledging and showing concern for complaints communicates distance and disapproval. This action is characterized by silence, monosyllabic speech, changes of subject, and physical removal of self. In addition to criticism, defensiveness, and contempt, for 10 points, name this fourth "horseman of the apocalypse" in Gottman's relationship conflict theory, referring to an individual's lack of responsiveness as a reaction to conflict.
ANSWER: **stonewalling**   KV

Bonuses

1. Give the names of some units used to measure electrical quantities, for ten points each.

[10] This is the SI unit used to measure the electrical resistance of a substance. It is named after the man who proposed a law that states that voltage and current are directly proportional.
ANSWER: **ohm**

[10] In the SI system, the inverse of resistance, electrical conductance, is measured in these units. The man who named it also gave his name to a leading electrical and telecommunications company that he founded.
ANSWER: **siemens** [prompt on "S"]

[10] The dipole moment of two equal point charges is sometimes measured using these units. Defined as 10^{-18} statcoulomb-centimetres, it is not an SI unit.
ANSWER: **debye** [prompt on "D"]   AR

2. Gossip Girl would enjoy spending some time in the Hindu heaven for it is filled with marital woes and family quarrels. For ten points each, answer some questions about hurt sentiments in the Hindu pantheon.

[10] This destroyer god was offended because his father-in-law refused to bow before him. In the subsequent drama, his wife committed suicide and he killed a whole bunch of people before later bringing them all back to life. The Ganges is said to have emerged from his head.
ANSWER: **Shiva** [accept Param**eshwar**a]

[10] This elder son of Shiva and Parvati was created by the goddess when she needed somebody to stand guard outside the shower as she bathed. According to one story, he was beheaded by his father but got an elephant's head as a replacement.
ANSWER: **Ganesha** [accept his hundreds of other names like **Vinayakar**, **Pillaiyar**, **Ganapati**, **Vigneshvara**, **Ekadanta**, etc]

[10] Ganesha's younger brother, Murugan, once shaved his head and ran away from his family out of jealousy of his brother. That dispute stemmed from his parents giving a particularly sweet one of these to his brother and not to him.
ANSWER: **Fruit** of Knowledge [accept **mango** or **apple**, but no other types of fruit]   AR

3. This "adoptive emperor" succeeded Hadrian. For ten points each, answer the following questions on the fifteenth emperor of Rome.

[10] This emperor had no military experience, but ruled the Roman empire for twenty-three prosperous and mostly peaceful years. Governing almost exclusively from Rome and the surrounding regional territory of central Italy, his primary focus was to finish Hadrian's works.
ANSWER: **Antoninus** Pius [accept Titus Aurelius Fulvius Boionius Arrius **Antoninus**]

[10] This woman was married to Antoninus Pius. She was given the title "Augusta" and was deified by Antoninus Pius when she died.
ANSWER: Annia Galeria **Faustina** the Elder [do not accept "Faustina the Younger"]

[10] When Hadrian named Antoninus Pius his second adopted heir, he did so with the condition that Antoninus Pius in turn adopts this nephew of his, the last of the "Five Good Emperors".
ANSWER: **Marcus Aurelius** [accept **Marcus Annius Verus**]   LY

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4. On account of the surprising announcement that the Pulitzer Prize for Fiction will not be awarded in 2012, answer some questions, for ten points each, about works and authors that have almost won the Pulitzer.

[10] Shortlisted for the 2012 prize was this novel, sections of which portray the lives of IRS employees in Illinois. It was put together by the author's editor, Michael Pietsch, after its author committed suicide in 2008.
ANSWER: *The **Pale King***

[10] A runner-up to 1998's winner, *American Pastoral*, was this DeLillo novel centering on waste management executive Nick Shay. It's prologue was published as a separate novella titled "Pafko at the Wall".
ANSWER: **Underworld**

[10] The year Steven Millhauser's novel *Martin Dressler* won, this author's short story collection *Unlocking the Air and Other Stories* was on the shortlist. She may be better known for writing about Ged in *A Wizard of Earthsea.*
ANSWER: Ursula Kroeber **Le Guin**   HZ

5. Answer these questions people about involved in the Bauhaus movement, for ten points each.

[10] Despite this man's influential position as the first director of the Bauhaus School, he couldn't draw. He also taught architecture at Harvard, and designed the Harvard House and a house named after him in Lincoln, Massachusetts.
ANSWER: Walter **Gropius**

[10] This man was the director of Architecture at the Bauhaus School, and was famously so fastidious that he only allowed the blinds to be all the way up, all the way down, or exactly in the middle in his famous Seagram building.
ANSWER: Ludwig **Mies** van der Rohe

[10] This man taught design at the Bauhaus. He likened art to music, creating seven painting called compositions, and wrote *Concerning the Spiritual in Art* as one of the foremost theories in abstract art.
ANSWER: Wassily **Kandinsky**   JL

6. Gauss published six different proofs of this result. For ten points each:

[10] Name this law which can be stated as, given two odd primes p and q, the Legendre symbol p upon q equals q upon p when one of p or q is congruent to 1 mod 4. If both primes are congruent to 3 mod 4, then p upon q equals minus q upon p.
ANSWER: **quadratic reciprocity**

[10] The law of quadratic reciprocity was extended to composite numbers by this mathematician who also names a type of matrix consisting of first-order partial derivatives, and who, along with Niels Abel, introduced the theory of elliptic functions.
ANSWER: Gustav Carl Jacob **Jacobi**

[10] Gauss discovered a neat application of quadratic reciprocity to this problem by using quadratic residues to exponentially reduce the solution space. For a number n, this problem involves expressing n as a product of primes.
ANSWER: **factoring** [accept obvious equivalents]   HZ

7. For ten points, answer these questions about British monarchs with notable durations of reign.

[10] This monarch's reign has the distinction of being the shortest, with a technical reign of 9 days that ended with her being charged with treason and a subsequent execution.
ANSWER: Lady **Jane Grey** or Lady **Jane Dudley**

[10] This longest-reigning British monarch was the last of the House of Hanover, and ruled for 63 years and 216 days, which also happens to be the longest of any female monarch in history.
ANSWER: Queen **Victoria**

[10] This longest-reigning male British monarch is mostly remembered for his mental illness and for having

been on the losing end of the American Revolution.
ANSWER: **George III** KV

8. For ten points each, answer these questions relating to Borat's home country, which is not Canada, but the Glorious Nation of Kazakhstan.

[10] The world's largest landlocked country, Kazakhstan is neighboured by this many other countries, which is the number of provinces of Canada multiplied by one half.
ANSWER: **five**

[10] Since 1998, Kazakhstan's largest city, Astana, has been its capital, succeeding this major commercial and cultural center which was its previous capital.
ANSWER: **Almaty**

[10] This body of water between Kazakhstan and a region of Uzbekistan was once one of the largest lakes in the world, but after diversion due to irrigation projects, it has shrunken to a tenth of its original size, eventually splitting into 4 lakes.
ANSWER: **Aral Sea** KV

9. For ten points each, answer these questions about sexual escapades in Chinese literature.

[10] This protagonist of *Dream of the Red Chamber* loses his virginity to Two in One, an amalgamation of his two primary romantic interests, Lin Daiyu and Xue Baochai, in the spirit world.
ANSWER: Jia **Paoyu** [accept **Baoyu** or **Precious Jade**, do not accept "Jia" because it is a common family name]

[10] In this work, many female demons attempt to seduce the vulnerable monk Tang Sanzang, but he is usually saved in the nick of time by his disciples, a monkey, a sand golem and a pig.
ANSWER: *__Journey to the West__* [accept *__Xi You Ji__*]

[10] This novel comes from an early episode in *Water Margin.* It describes the fall of Liu Ximen, the lover of Wu Song's adulterous wife, and his six concubines, and has been considered both a literary classic and pornography.
ANSWER: *The **Plum in the Gold Vase*** [accept *__Jin Ping Mei__* or *The **Golden Lotus***] JL

10. Answer some questions about World War II events in Asia, for ten points each.

[10] This event led to the deaths of several thousands of prisoners in the Philippines. The Japanese Army forced 70,000 prisoners to walk over 80 miles with minimal food and water and executed several of the men.
ANSWER: **Bataan** Death **March**

[10] This declaration outlined the terms of Japanese surrender and indicated that Japan would face "prompt and utter destruction" if it were rejected. The bombings of Hiroshima and Nagasaki compelled Japan to agree to every term outlined in this declaration.
ANSWER: **Potsdam** Declaration

[10] Some historians cite this event as Asia's entry into WWII. This conflict was perpetuated when Japanese forces were denied entry into China's Yuan Peng county, leading to the start of the Second Sino-Japanese War.
ANSWER: **Marco Polo Bridge Incident** or **7.7 Incident** or **Luokouchiao Incident** AR

11. Answer these questions about subjects of controversial works of art, for ten points each.

[10] This type of woman was the subject of a painting by Ingres, which was not only controversial because of its subject matter, but also because the main subject looked to have too many vertebrae and a pelvic distortion.
ANSWER: **odalisque**

[10] Marcel Duchamp famously posed as this transexual woman in a series of photographs by Man Ray. She is asked, "Why not sneeze?" in another title of his work, a birdcage containing, amongst other things, 152 cubes of marble.
ANSWER: **Rose Selavy**

[10] Jacques-Louis David's depiction of this man's martyrdom at the hands of Charlotte Corday was one of the reasons David's body was not allowed to be interred in France.
ANSWER: Jean-Paul **Marat** [accept *The **Death of Marat*** or its French titles]   JL

12. Since no other tournament is likely to let me write a bonus on Separatist literature, here's a bonus on Separatist literature. For ten points each:

[10] This author's novel *Friday* depicts a dystopian future in which not only has Quebec separated from Canada, but North America itself has been broken up into a number of countries, including the Alaska Free State and the Chicago Imperium. This man also wrote about a human raised by Martians who returns to Earth in *Stranger in a Strange Land.*
ANSWER: Robert Anson **Heinlein**

[10] Jules Verne's novel *A Family Without a Name* depicts the struggles of the titular family trying to bring about Quebecan independence. It was based on this 1837 event which included the battles of St. Eustache and St. Denis, and which resulted in the exile of Louis-Joseph Papineau.
ANSWER: **Lower Canada Rebellion**

[10] Of course, a question on literary Separatists would be remiss without mention of this man, who reminded the title group that "it's now your turn to let yourselves talk of love" in what has become Quebec's unoffical anthem, "Gens du Pays". He is probably best known for his song "Mon Pays".
ANSWER: Gilles **Vigneault**   HZ

13. Race and religion may divide the world, but the stupidity of politicians is universal. For ten points each, answer some questions about hilarious gaffes made by leaders from across the world.

[10] This reality TV star and former vice-presidential candidate likened herself to Shakespeare when people slammed her for using "refudiate" several times in interviews and on Twitter.
ANSWER: Sarah **Palin**

[10] At the G20 Summit last year, Nicholas Sarkozy's microphone accidentally caught him calling this man a "liar". Barack Obama vehemently agreed, adding that "he had to deal with [this man]" even more than Sarkozy.
ANSWER: Benjamin **Netanyahu**

[10] While addressing the UN Security Council in February last year, Indian External Foreign Affairs Minister, S. M. Krishna was apparently handed the wrong speech to read. It was only several paragraphs into his delivery that he was intimated that the address he was reading was not India's but this European nation's.
ANSWER: **Portugal**   AR

14. Answer some questions about acid! For ten points each:

[10] The strength of an acid is determined by the concentration of these ions. pH is defined as the negative logarithm of the concentration of these ions.
ANSWER: **hydronium** or $\underline{H^+}$ or $\underline{H_3O^+}$ [prompt on "oxonium"; do not accept "proton"]

[10] By this definition of acids, an acid is any substance that dissociates in an aqueous solution to produce hydronium ions. Because this definition is restricted to aqueous solutions, pure H_2SO_4 is not an acid in this system.
ANSWER: **Arrhenius** definition

[10] This term refers to the number of hydronium ions released when one mole of the acid dissociates in an aqueous solution.
ANSWER: **proticity**   AR

15. Answer these questions about that totally Canadian psychologist Harry Harlow and his attachment experiments, for ten points each.

[10] Harlow demonstrated the importance of contact comfort through his maternal-separation experiments on these types of animals.
ANSWER: rhesus **monkeys**

[10] Harlow removed baby rhesus monkeys from their mothers and had them reared by two kinds of surrogate mother machines; one was referred to as a terrycloth mother; the other was made of this material.
ANSWER: **wire**

[10] Another deliberately outrageously named experimental apparatus was this device of Harlow's, in which baby monkeys were left alone in darkness for up to a year from birth, leading them to become psychologically disturbed.
ANSWER: **pit of despair**   KV

16. This literary term may have originally been a synonym for "thought". For ten points each:

[10] Name this term used to describe an extended metaphor in a poetic work, particularly one which is notable for its ingenuity. Variants of it are the *blazon* and the metaphysical types.
ANSWER: **conceit**

[10] A famous send-up of the blazon conceit is this Shakespearean sonnet in which the speaker lists many unremarkable qualities of his lover, but concludes, "And yet, by heaven, I think my love as rare/As any she belied with false compare."
ANSWER: **"My mistress' eyes are nothing like the sun"** or Sonnet **130** [either first line or number is acceptable]

[10] Perhaps the most well-known of the Metaphysical poets was this man who notably used a conceit of twin-compasses to describe two lovers' souls in his "Valediction: Forbidding Mourning".
ANSWER: John **Donne**   HZ

17. For ten points each, name some Canadian political scandals.

[10] The In and Out scandal dealt with the Conservative Party of Canada improperly spending during the 2006 federal election. This political party had previously used the "In and Out" scheme during the 2000 federal election.
ANSWER: **Bloc Quebecois**

[10] This woman was a German prostitute who had multiple affairs with federal cabinet ministers under the Diefenbaker government. This alleged Soviet spy names Canada's first major political sex scandal.
ANSWER: Gerda **Munsinger**

[10] This man was forced to resign his premiership after being taken to trial on allegations of seduction by Vivian MacMillan. He was the last leader of the United Farmers of Alberta Party to serve a full term as

Premier of Alberta.
ANSWER: John Edward **Brownlee** AS

18. Answer these Questions about Tarot Cards, for ten points each.

    [10] This group of 22 cards is considered the trump suit in a Tarot Deck. It includes such cards as the Lovers, the Priestess, and Death.
    ANSWER: Major **Arcana**

    [10] This card is often described as the protagonist of the Major Arcana. He is usually depicted a beggar or a jester, and can be numbered 0, 22, or not at all, depending on the deck. He is called Le Mat in the Tarot of Marseilles, and Il Matto in Italian.
    ANSWER: the **Fool**

    [10] Numbered 16, this card is referenced in the 27th chapter of *Harry Potter and the Half-Blood Prince.* It symbolizes either failure, ruin or disaster, or a paradigm shift, and is alternatively called La Foudre.
    ANSWER: the **Tower** JL

19. Answer these questions about the philosophy of Stoicism, for ten points each.

    [10] The Stoic philosophy was founded in Athens around 30 BC by this philosopher of Cyprian origin.
    ANSWER: **Zeno** of Citium

    [10] Epictetus introduced this term as a basic concept in Stoicism, signifying the "will" or "choice" through which humans can rationally choose how to react to impressions.
    ANSWER: **prohairesis**

    [10] In a classification derived from Plato's teachings, Stoicism's four cardinal virtues include wisdom, courage, justice, and this virtue which was typically associated with the working class.
    ANSWER: **temperance** [accept **restraint**] KV

20. Disorders of this activity affect up to 70 million Americans and are among the least recognized sources of disease, disability, and death. For ten points each:

    [10] Name this activity performed by humans for nearly one third of their lives, usually at night.
    ANSWER: **sleep**

    [10] This sleep disorder has been linked in some patients to lowered amounts of the protein hypocretin and is characterized by patients going suddenly from being fully awake to entering REM sleep.
    ANSWER: **narcolepsy**

    [10] Narcoleptics tend to have these paralysis attacks during which they are awake, but their muscles act as if in REM sleep. The attacks can be triggered by emotional experiences, such as hearing a funny joke.
    ANSWER: **cataplexy** LY

21. It was praised by Entertainment Weekly as being "in a class by itself". Answer these questions about everyone's new favourite book, for ten points each.

    [10] Originally titled *Master of the Universe* and published episodically as fanfiction under the nom de plume Snowqueens Icedragon, this novel by E.L. James has now surpassed the *Harry Potter* series in setting the record for the fastest-selling paperback of all time.
    ANSWER: *__50 Shades of Grey__*

    [10] *50 Shades of Grey* was originally published as fanfiction for this other classic work of literature.
    ANSWER: *__Twilight__*

    [10] This character in *50 Shades of Grey* is an insecure college student who falls in love with the title character despite his overt pathological idiosyncrasies. She also has an inner goddess whose input during the book

could be an entire novel on its own.
ANSWER: **Anastasia** Steele

22. In music theory, a triad is classified as the most common type of this musical item. For ten points each:

[10] Name this musical item which contains at least two notes, and can be played in a solid, broken, or arpeggiated form.
ANSWER: **chord**

[10] This type of chord is built on the fifth degree of the tonic note, and consists of a root, major third, perfect fifth, and minor seventh.
ANSWER: **dominant seventh**

[10] In the correct order, give the notes of the first inversion of the dominant seventh chord of G major.
ANSWER: **F#, A, C, D**